

11. A personal computer system comprising:
- a processor;
 - a bus;
 - main memory;
 - a system controller;
 - a graphics controller;
 - a video source capable of providing a digital YUV video signal;
 - a video output capable of connecting to a video display device; and
 - a digital processor that computationally applies gamma correction to the digital YUV signal provided by the video source and provides a corrected signal to the video output.

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on March 29, 2002, and the references cited therewith.

No claims are amended, cancelled, or added; as a result, claims 1-11 are now pending in this application.

§102 Rejection of the Claims

Claims 1-3, 5-8 and 10 were rejected under 35 USC § 102(e) as being anticipated by Aleksic et al. (U.S. Patent No. 6,020,921).

Aleksic discusses in col. 1, lines 37-39, and in column 2, lines 64-65, that a lookup table read-only memory (ROM) is required in a computer system to perform gamma correction of a YUV signal. The cited prior art gamma correction circuit shown as element 3 in Figure 2 of the Aleksic reference is such a gamma correction lookup table (*see, e.g.* col. 3, ln. 8-13) Aleksic claims improvement on the read-only memory gamma correction system by implementing three circuits to perform straight-line approximation of a gamma correction curve, and switching between these three straight-line approximation circuits based on a comparison circuit that makes a circuit selection determination based

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on the received input. The Aleksic reference therefore does not computationally employ a corrective algorithm, but employs a lookup table.

In contrast, the present invention utilizes and claims a digital processor employing a corrective algorithm that computationally applies gamma correction to a digital YUV signal. That is, the present invention does not utilize a lookup table or switch between straight-line approximations of a gamma correction curve as are discussed in Aleksic, but instead utilizes a digital processor to computationally apply a corrective algorithm to the digital YUV signal to perform gamma correction.

The cited Figure 2 does not illustrate anything further than a gamma correction element 3 which is elsewhere described to use a lookup table rather than computational application of an algorithm, and the cited col. 5, ln. 57-67 and col. 6, ln. 1-35 describe only a circuit for receiving a gamma select signal and applying one of four gamma correction factors to a signal via lookup tables.

Because no part of this reference describes computational application of an algorithm to apply gamma correction to a YUV signal as is claimed in the pending claims, applicant respectfully requests reexamination and allowance of these pending claims.

§103 Rejection of the Claims

Claims 4 and 9 were rejected under 35 USC § 103(a) as being unpatentable over Aleksic et al. (U.S. Patent No. 6,020,921).

The Examiner has again indicated intent to take Official Notice of select missing elements by maintaining a single reference §103 rejection, and so Applicant respectfully repeats his objection to the taking of Official Notice with a single reference obviousness rejection. Pursuant to M.P.E.P. § 2144.03, Applicant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position should it be maintained.

the claim is
one of missing
NTSB, CVD, CD
No!

The digital processor employing a corrective algorithm to perform gamma correction is not present in Aleksic, and differs significantly in structure and function from anything that is found in Aleksic as was explained in greater detail with respect to the §102 rejection discussed above. Further, as claims 4 and 9 depend from a base claim believed to be in condition for allowance as explained

above, applicant believes that claims 4 and 9 are in condition for allowance as properly dependent upon an allowable base claim.

Also, the Examiners assertion that all personal computers and other types of display perform functions such as brightness correction via a digital processor employing a corrective algorithm is respectfully traversed, and the Examiner is requested to cite references in support of this position if the rejection is maintained. Computer monitors and television monitors typically perform such correction via analog circuitry, and computationally performing the functions of claim 2, taken in combination with the functions of it's base claim 1, has not been shown to be anticipated in any cited reference.

Because the claims here rejected have been shown to contain elements not present in the Aleksic reference, either on their own or through dependence on an allowable base claim, reexamination and allowance of these pending claims is respectfully requested.

Claim 11 was rejected under 35 USC § 103(a) as being unpatentable over Aleksic et al. (U.S. Patent No. 6,020,921) in view of Warren et al. (U.S. Patent No. 6,304,300).

Applicant respectfully submits that the argument presented with respect to independent claims 1 and 6 also applies here, and incorporates the same arguments by reference. Most specifically, Alkesic again lacks computational gamma correction applied in a digital processor, and so is patentably distinct from the cited references. Reexamination and allowance is respectfully requested.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-349-9581) to facilitate prosecution of this application.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/217,873

Filing Date: December 21, 1998

Title: DIGITAL YUV VIDEO EQUALIZATION AND GAMMA CORRECTION

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Dkt: 450.221US1

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 27 day of June, 2002.

Candis B. Buending

Name

Signature

[Signature]